

I CLAIM:

1. A rotary food server for storing food in a chilled condition and serving it to a user, comprising,

a horizontal, stationary base;

5 a dish mounted for rotation on said stationary base about a vertical, central axis, said dish having a bottom wall, a peripheral rim, a central boss having an outer peripheral wall spaced radially from and facing toward said rim and a plurality of dividing walls extending radially between said boss and said rim to define a plurality of peripherally spaced pockets;

10 a plurality of trays shaped and sized to fit snugly and removably within said pockets, each said tray having a bottom wall facing towards said bottom wall of said dish, side walls extending radially in contact with the adjacent dividing walls defining the pocket within which the tray is received, inner and outer end walls extending peripherally in contact with adjacent
15 regions of said boss and said rim, said walls of the tray defining an upwardly open tray interior within which food may be placed for storage, and a lid movably connected to the tray for opening and closing over the tray interior; and

at least one coolant housing associated with each said tray, said
20 coolant housing containing a chill retaining substance, said coolant housing positioned adjacent at least one wall of said tray for thermal transfer between said chill retaining substance and food placed within said tray, said tray and the associated said coolant housing being removable from said dish to enable said chill retaining substance to be refrigerated;

25 whereby, after refrigeration of said coolant housing and said substance therein, and subsequent placement of food within the associated tray and placement of said tray on said dish, the food within is stored in a chilled condition and may be served by rotating said dish to move the tray into proximity to the user and opening the lid.

2. The rotary food server as defined in claim 1, wherein said coolant housing comprises a hollow closed container removably positioned between the associated said tray and said bottom wall of said dish, within the associated
5 said pocket, for thermal transfer through the bottom of said tray.

3. The rotary food housing as defined in claim 2, wherein said coolant housing further includes additional hollow closed containers removably connected with said dividing walls extending upwardly therefrom
10 in contact with said sidewalls of the associated said tray for thermal transfer through the sides of said tray.

4. The rotary food server as defined in claim 1, wherein at least a portion of said walls of each said tray has hollow enclosed regions constituting
15 said coolant housing.

5. The rotary food server as defined in claim 4, wherein said hollow enclosed regions containing said chill retaining substance are in each of said side and end walls of each said tray.
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6. The rotary food server as defined in claim 1, wherein said lids are detachably, as well as movably, mounted to said trays, said trays being relatively sized and shaped to be stacked together in nested relation after removal of said lids.
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7. The rotary food server as defined in claim 1, wherein said trays

have different peripheral widths to have different interior capacities and said dividing walls of said dish are positioned to define said plurality of pockets to be of complementary shapes to said differently sized trays.

5 8. The rotary food server as defined in claim 1, wherein each said dividing wall of said dish extends peripherally for a sufficient peripheral distance to ensure that when adjacent said lids of adjacent said trays in place in said dish on either side of the dividing wall are raised concurrently from the closed to the open position they do so without interference between the lids.

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 9. The rotary food server as defined in claim 1, wherein at least one of said lids of said trays is transparent to permit food placed within to be visible when said lid is closed.

15 10. The rotary food server as defined in claim 1, wherein at least one of said lids of said trays is provided with a further hollow interior region containing the chill retaining substance.

 11. The rotary food server as defined in claim 1, further including,
20 an interior wall of said boss defining, within said boss, a hollow upwardly open well closed at its lower end;

 a cup for food shaped and sized to fit snugly within said well, removable and replaceable therein by vertical sliding motion; and

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a lid for covering said cup.

12. The rotary food server as defined in claim 8, further including,

5 a sleeve within said well peripherally surrounding said cup, said sleeve also containing the chill retaining substance, said sleeve being refrigerated before placement of food in said cup to enable the food to be stored in said cup in a chilled condition.

10 13. The rotary food server defined in claim 1, further including,

a pocket insert positioned in each pocket, sized and shaped to conform thereto, between said bottom wall of said dish and the bottom wall of the one of said trays received in the pocket;

15 14. The rotary server as defined in claim 1, wherein,

said boss is provided with hollow regions of its outer peripheral wall, adjacent to the inner end walls of said trays, also containing said chill retaining substance.

20 15. The rotary server as defined in claim 1, wherein each dividing wall comprises,

a pair of radially extending, spaced, bottom dividing walls molded into said dish extending upwardly from its bottom wall, said bottom walls

defining a slot between them; and

a main dividing wall fitted within said slot extending upwardly therefrom, said main dividing wall having hollow interior regions containing
5 said chill retaining substance.

16. The rotary server as defined in claim 1, wherein each lid is connected to its associated one of said trays by structure comprising at least one hinge having,

10 an axle mounted to one of said inner end wall of said tray and said lid; and

a split socket, rotatably encircling said axle, mounted on the other of said inner wall and said lid, said split socket enabling snap fit connection to said axle for detachment and reattachment of said lid and said tray.

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17. A rotary food server for storing food in a chilled condition and serving it to a user, comprising:

a horizontal, stationary base;

a lower housing mounted for rotation on said stationary base
20 about a vertical, central axis, said lower housing having a bottom wall and a peripheral rim extending upwardly from the bottom wall and forming a cavity in the lower housing; and

an upper housing having a plurality of cavities therein within which food may be placed for storage and capable of being mounted over the
25 lower housing and partially within the cavity therein;

whereby a cooling medium placed within the cavity of the lower housing contacts portions of the upper housing defining the cavities therein so as to chill food stored within the cavities when the upper housing is mounted over the lower housing.

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18. A rotary food server as defined in claim 17, wherein the cavities in the upper housing have bottoms and sides exposed at the underside of the upper housing, whereby a cooling medium placed within the cavity of the lower housing is displaced upon mounting of the upper housing over the lower housing so as to contact the bottom and at least portions of the sides of the cavities in the upper housing.

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19. A rotary food server as defined in claim 17, wherein the cooling medium comprises a mixture of water and ice.

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20. A rotary food server as defined in claim 17, wherein the lower housing and the upper housing are each of one-piece construction.

21. A rotary food server as defined in claim 17, further including a plurality of hinged lids removably mounted on the upper housing to cover the cavities therein when closed.

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22. A rotary food server as defined in claim 17, wherein the upper housing is of circular configuration, and the cavities therein include a central cavity at the center of the upper housing and a plurality of peripheral cavities extending outwardly from the central cavity in radial fashion.

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23. A rotary food server as defined in claim 22, wherein the upper housing includes a circular central pocket therein surrounding the central cavity and a plurality of peripheral pockets therein extending radially outwardly from the central pocket between adjacent pairs of the peripheral cavities, whereby a cooling medium placed within the cavity of the lower housing is displaced by the central pocket and the peripheral pockets upon mounting of the upper housing over the lower housing.

10 24. A rotary food server as defined in claim 17, wherein the lower housing and the peripheral rim thereof are of circular configuration, and the upper housing is of circular configuration and has a downwardly extending peripheral rim of circular configuration which forms a snap fit with peripheral rim of the lower housing when the upper housing is mounted over the lower
15 housing.